

# C20502

# CITIZEN®

## Product Description

181 Channel Tuner  
AV/DVD Input  
AV Output  
MTS/AV Stereo Sound  
Channel Recall  
Closed Caption Display  
Remote Control  
On/Off Timer  
Parental Control  
RF IN Jack  
S-Video Input  
Selectable Picture Modes  
Selectable Sound Modes  
Trilingual On Screen Display (OSD)  
AVC - Auto Volume Correction

## USER MANUAL



## WARNING

To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.



**Caution:** To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.



This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.



This symbol indicates important instructions accompanying the product.

**Caution:** To prevent electric shock, match wide blade of plug to wide slot, fully insert.

Refer to the identification/rating label located on the back panel of your product for its proper operating voltage.

**Caution:** Using video games or any external accessory with fixed images for extended periods of time can cause them to be permanently imprinted on the picture tube (or projection TV picture tubes). ALSO, some network/program logos, phone numbers, etc. may cause similar damage. This damage is not covered by your warranty.

**Cable TV Installer:** This reminder is provided to call your attention to Article 820-40 of the National Electrical Code (Section 54 of the Canadian Electrical Code, Part 1) which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

### Customer Record

You will find the model number and chassis number of your TV on the back of your TV set. Record these numbers in the spaces provided below. Refer to them whenever you call customer service or your dealer regarding this product.

Model Number: \_\_\_\_\_ Chassis Number: \_\_\_\_\_

## IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. **Warning - This TV should only be serviced by an authorized and properly trained technician. Opening the cover or other attempts by the user to service this TV may result in serious injury or death from electrical shock, and may increase the risk of fire.**



## FCC Warning

Class B Computing Device  
Information to User

This equipment has been tested and found to comply with the limits for a Class B Digital Device pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment receives interference while off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1) Reorient or relocate the receiving antenna.
- 2) Increase the separation between the equipment and TV.
- 3) Connect the equipment into an outlet on a circuit different from that to which the TV is connected.
- 4) Consult the dealer or an experienced radio/TV technician for help and for additional suggestions.

The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio - TV Interference Problems". This booklet is available from the US Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

## FCC Warning

The user is cautioned that changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

**Note:** In order for an installation of the product to maintain compliance with the limits for a Class B Device, shielded cables must be used.

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## SPECIFICATIONS

Television System	NTSC-M
Channel Coverage	VHF 2-13, UHF 14-69
Cable TV Coverage	Mid Band (A-8~A-1, A~I); Super Band (J~W) Hyper Band (AA~ZZ, AAA, BBB) Ultra Band (65~94, 100~125)
Channels Preset	181
Antenna Input	75 ohm (unbalanced)
Screen Size	20"
Audio Output	3W + 3W
Total Harmonic Distortion	<7%
Power Source	~120Vac 60Hz
Unit Weight	25 kg
Unit Dimensions	585 x 485 x 460 mm
Power Consumption	110W

## Feature Descriptions

**181 Channel Tuner** - total number of channels the TV can receive: 2-69 in Air mode, or 1-125 in Cable mode

**AV/DVD Input (Rear)** - input designed for use with A/V devices, such as a VCR or DVD player

**AV Output (Rear)** - output signals from TV to devices such as a VCR

**MTS/AV Stereo Sound** - stereo sound for superior TV viewing experience

**Channel Recall** - instant return to the last channel viewed

**Closed Caption Display** - feature that displays the closed captions or text of a TV broadcast

**Remote Control** - A wireless remote control unit for the TV

**On/Off Timer** - feature that allows the user to set a timer to turn on/off the TV

**Parental Control** - feature that allow parents to block out selected type of programming

**RF IN Jack** - standard coaxial antenna jack

**S-Video Input** - input designed for greater clarity and sharpness; also known as S-VHS

**Selectable Picture Modes** - preset standards for TV display: Memory, Theater and Normal

**Selectable Sound Modes** - preset standards for TV sound: Memory, Speech, Music and Theater

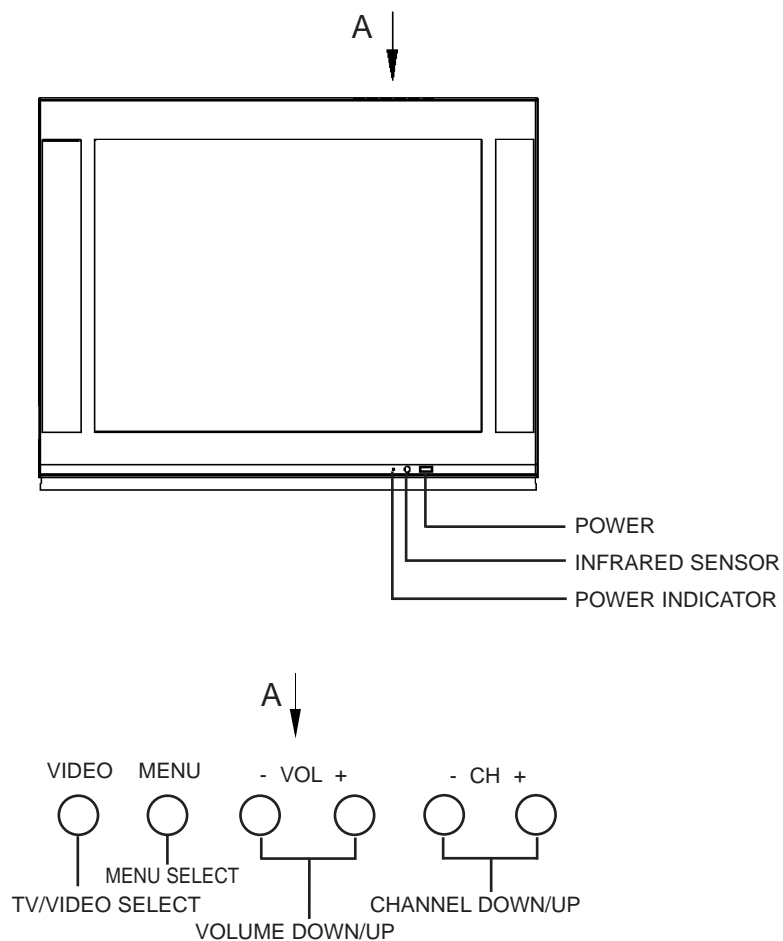
**Trilingual On Screen Display (OSD)** - TV's on screen display, can be either English, French or Spanish

**AVC** - Auto Volume Correction

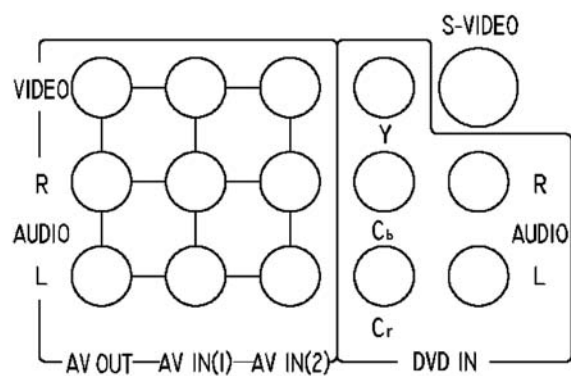
<b>PACKING LIST</b>	
<b><u>Parts</u></b>	<b><u>QTY</u></b>
Colour TV Receiver	1
Remote Control	1
Operation Manual	1
AAA Alkaline Batteries	2
Warranty	1

## Front and Rear Unit Profiles

### Front panel

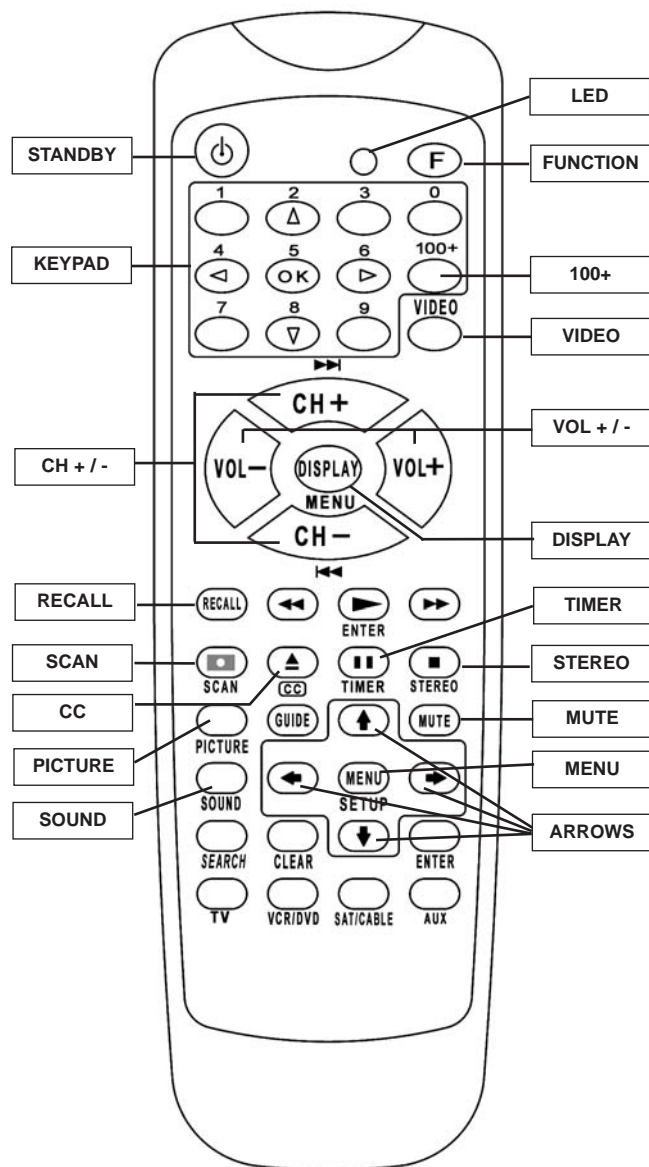


### Rear panel



## Remote Control Features

<b>STANDBY</b>	Turns on/off the TV
<b>KEYPAD</b>	Used to select channels by number
<b>CH + / -</b>	Used to change the current channel
<b>RECALL</b>	Returns to the last channel viewed
<b>SCAN</b>	Scans all the active channels
<b>CC</b>	Activates Closed Captioning
<b>PICTURE</b>	Selects the various Picture Modes
<b>SOUND</b>	Selects the various Sound Modes
<b>LED</b>	Indicator light
<b>FUNCTION</b>	Used for volume control and child lock
<b>100+</b>	Three digit select
<b>VIDEO</b>	Cycles through the Video/TV modes
<b>VOL + / -</b>	Used to adjust the volume level
<b>DISPLAY</b>	Brings up the TV/Video display
<b>TIMER</b>	Accesses the Timer menu
<b>STEREO</b>	Selects the Stereo modes among On/L/R
<b>MUTE</b>	Mutes or restores the TV volume
<b>MENU</b>	Brings up the main Menu
<b>ARROWS</b>	Used to navigate the TV menus



## INSTALLATION

- Please read the safety instructions in this manual completely before installation.
- Install your TV in an area where direct sunlight will not fall upon the screen.
- Soft, indirect light is best for television viewing.
- Allow enough space (at least 4 in.) between the TV and any walls or enclosures for proper ventilation.
- Optimum television viewing distance is 3-5 times the screen's size.

### Auto-Degaussing

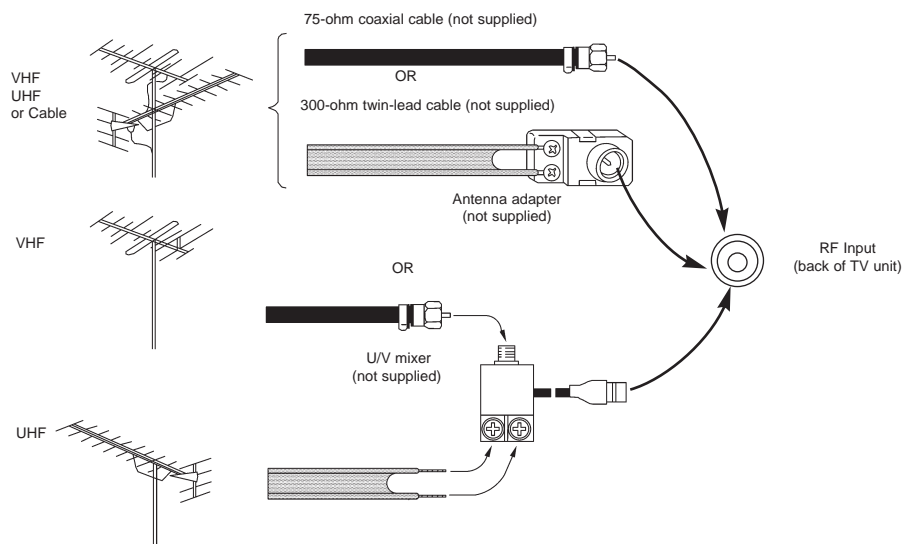
Color television can be easily affected by magnetism, which shows as color distortion on the screen. If your TV is affected by nearby magnetic components or appliances, turn it off for a few minutes. The built-in auto-degaussing circuit will eliminate the magnetic interference.

### Auto off when no signal received

The TV set will automatically enter into Standby mode when the following conditions are met.

1. TV is in antenna mode.
2. Current channel has no signal.
3. No key is pressed within 15 minutes.

### Connecting the Antenna



#### Notes:

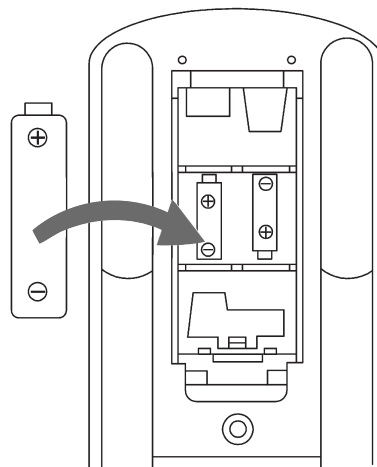
1. It is recommended that a 75 ohm coaxial cable be used in order to eliminate interference and noise which may occur due to nearby radio transmissions.
2. The antenna cable should not be tied together with other wiring.
3. Set up a lightning rod and check it regularly when an outdoor antenna is used.

### Installing the Remote Control Batteries

1. Remove the battery compartment lid.
2. Insert two AAA batteries (included). Make sure the positive (+) and negative (-) polarities are correctly aligned.
3. Reattach the battery lid.

#### Notes:

1. Alkaline batteries are recommended for longer life.
2. Always replace both batteries at the same time.
3. Do not expose batteries to fire or break them open.
4. To avoid battery leakage, remove batteries from the remote control when it is not being used for a long period of time.

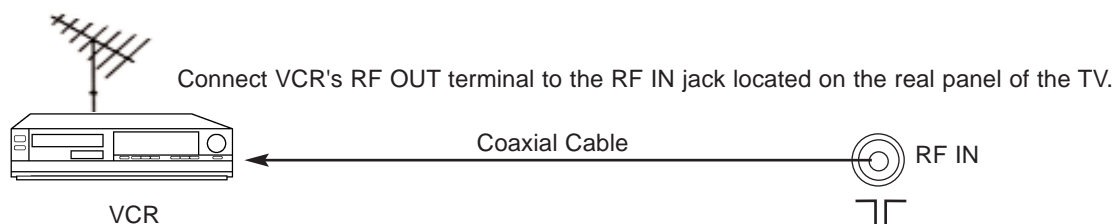




## INSTALLATION (continued)

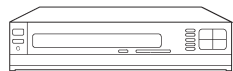
### Connecting A/V Equipment

The following are diagrams showing basic instructions for attaching external equipment, like a VCR or DVD player, to your TV set. Please refer to operation manuals of external audio/video equipment that will be connected to your set for additional instructions. PLEASE TURN OFF ALL POWER BEFORE CONNECTING DEVICES TOGETHER.



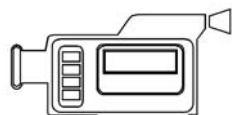
### Input from Device to TV

#### AUDIO/VIDEO OUT

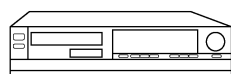


DVD Player

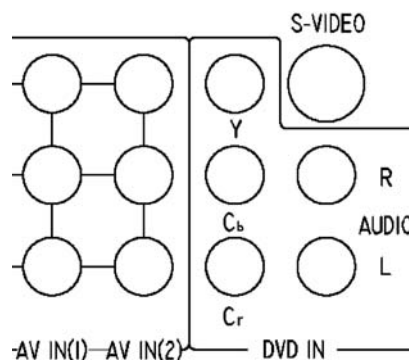
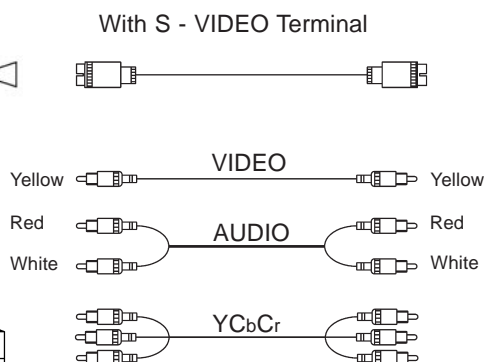
DO NOT connect both composite (yellow video terminal) and S-Video terminal. Use only one of the two. **Also, remember to connect the audio cables when using S-Video.**



Camcorder

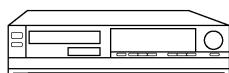


VCR

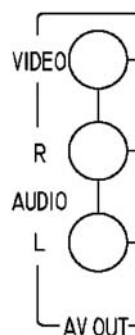


### Output from TV to Device

#### AUDIO/VIDEO IN



VCR



## FUNCTIONS & FEATURES

### Turn On/Off

#### 1. Turn On

Plug in the power cord, and press the POWER key on the TV to turn on the TV.

#### 2. Standby

While the TV is on, pressing the STANDBY key on the remote control will put the TV in Standby mode. To turn the TV on again, press the STANDBY key. To completely turn off the power to the TV set, press the POWER key on the TV.

### Basic Functions

#### Changing the Channel

While in Tuner mode, press the CH +/- keys to change the channel, or use the numeric keypad to enter a new channel.

#### Adjusting the Volume

To adjust the volume, press the VOL +/- keys. Also, you may press the FUNCTION (F) key along with the VOL +/- keys to adjust the volume in increments or decrements of 4.

#### Muting the Volume

To mute the volume, press the MUTE key. To restore the volume, press MUTE again or press the VOL + key.

### Function Selection Menus

To change the setting of any function, press the MENU key to bring up the main menu. Press the up or down arrow key to highlight the desired sub-menu and press the left or right arrow key to access. While in the sub-menu, use the up or down arrow key to select the item and the left or right arrow to adjust the setting. Press the MENU key to return to the main menu and exit.


While in the setup menu, CH-/++ and VOL-/++ keys on the front panel will function as the down/up/left/right arrow keys on the remote control.

### Picture Menu

#### Features

This menu allows you to adjust the various picture settings. Use the up or down arrow key to move between the various settings, and the left or right arrow key to adjust them.

**Tint:** -31 (more purplish) to +31 (more greenish)  
**Brightness:** 0 (dimmiest) to 63 (brightest)  
**Contrast:** 0 (minimum contrast) to 63 (maximum contrast)  
**Color:** 0 (minimum color) to 63 (maximum color)  
**Sharp:** 0 (minimum sharpness) to 63 (maximum sharpness)


Picture		
	Tint	..... .....00
	Brightness	..... .....31
	Contrast	..... .....31
	Color	..... .....31
	Sharp	..... .....31

### Audio Menu

#### Features

This menu allows you to adjust the various audio settings. Use the up or down arrow key to move between the various settings, and the left or right arrow key to adjust them.

**Bass:** 0 (less Bass) to 63 (more Bass)  
**Treble:** 0 (less Treble) to 63 (more Treble)  
**Balance:** L31 (Left Dominance) to R31 (Right Dominance)  
**Surround:** Off; Low (slight surround effect); High (marked surround effect)  
**AVC:** Off, On  
**MTS:** Refer to description about the STEREO key

Audio		
	Bass	..... .....31
	Treble	..... .....31
	Balance	..... .....00
	Surround	Low
	AVC	Off
	MTS	Mono

## FUNCTIONS & FEATURES (continued)

### Tuner Menu

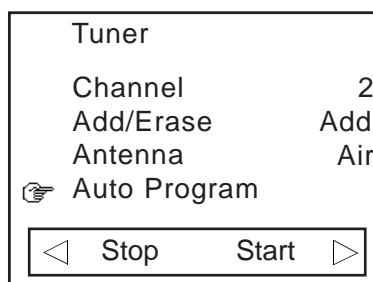
**Note:** This menu is only accessible while the TV is in Tuner mode.

**Channel:** This feature allows you to change the channel displaying on screen. Use the left or right arrow key or the numeric keypad to change the channel.

**Add/Erase:** This feature allows you to add or remove the channel currently display on screen to the "active channel list". Active channel list is the list of channel that is available by pressing the CH+/- keys. Use the left or right arrow key to add or erase.

**Antenna:** This feature sets the TV tuner to an Air antenna or a Cable antenna. Please use *Air* mode when using an over-the-air antenna; use *Cable* mode for a cable hookup. Use the left or right arrow key to select between the two options.

**Auto Program:** This feature will setup the Active channel list for the user. The list will include only the channels with a signal detected. Press the right arrow key to begin and the left arrow key to stop the process.



### Timer Menu

Press the TIMER key on the remote control to access this menu.

#### Time

This feature allows you to set the clock on the TV.

#### On Time

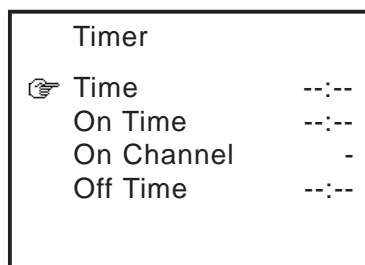
This feature allows you to preset a time when the TV set will turn on.

#### On Channel

This feature allows you to preset the channel on display when the On Time is activated.

#### Off Time

This feature allows you to preset a time when the TV set will turn off.



### System Menu

#### Language

This feature allows you to pick a language used for the on screen display (OSD). Use the left or right arrow key to select the language of your choice - English (Eng.), French (Fra.) or Spanish (Esp.).

#### Blue Back

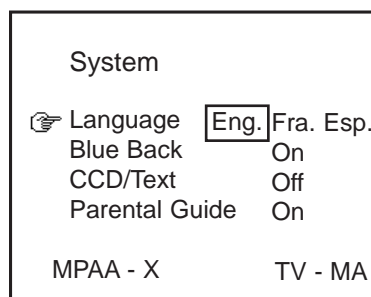
This feature gives you the option to display a blue background on the TV screen when there is no signal present. Use the left or right arrow key to toggle between on and off.

#### CCD/Text

Closed caption is a feature that allows your TV set to display, on screen, the dialogue, narration, and sound effect of a TV program. It also allows you to display teletext signal. Text and caption will be displayed at either the top or the bottom of the screen. There is nine different setting for closed caption. You can set it to one of the 4 Closed Caption settings (CC1-4), one of the 4 Text settings (T1-4), or set this feature to off (CCD/Text Off).

**Notes:** A Closed Caption signal may not be display under the following conditions:

- When there is no Closed Caption/Text signal to decode
- When the signal is weak or altered (due to interference or poor reception)
- When viewing a dubbed video tape



## FUNCTIONS & FEATURES (continued)

### System Menu (continued)

#### Parental Guide

This feature allows parents to block certain programs from being viewed, based on the programs' rating. In order to access this menu, you must first enter a pass code. The factory default is **6688**. Enter the pass code while the Parental Guide is highlighted. Now, with Parental Guide set as On, press the right arrow key to access the TV Rating grid.

#### TV Rating

Using the up or down arrow key to navigate between the ratings, press the MENU key to block out a particular rating completely. Or, if you wish, press the down arrow key to highlight an individual rating (anywhere a *U* is displayed in the middle of the grid.) Pressing the MENU key with one of these individual ratings highlighted will block only programs that feature that particular aspect. See the TV rating diagram at right for an example. TV ratings are defined in the charts below:

Age	Defined as
TV - Y	All Children
TV - Y7	Directed to Older Children (over 7)
TV - G	General Audience
TV - PG	Parental Guidance Suggested
TV - 14	Parents Strongly Cautioned
TV - MA	Mature Audience Only

Contents	Defined as
FV	Fantasy Violence
D	Sexual Dialogue
L	Adult Language
S	Sexual Situations
V	Violence

#### MPAA Rating

Press the right arrow key while in the TV Rating grid to access this grid. Use the up or down arrow key to navigate between the MPAA ratings. Pressing the MENU key with a rating highlighted will block that particular rating from being shown on this TV. A *B* will show in red next to the blocked rating. Please note that blocking a lower rating (for example, PG) will block all higher ratings (PG-13, R, NC-17, X.)

#### Pass Code Menu

This menu allows you to change the access code for the Parental Guide functions of the TV set. Press the MENU key when Pass Code Control is highlighted. This will turn on or off the Pass Code function. With the Pass Code function ON, you can also change the Pass Code. Use the down arrow key to highlight *Pass Code*, then enter the new Pass Code using the numeric keypad.

**Note:** The factory default pass code of 6688 is also the override code, in case you forget your new pass code.

#### System

Language Eng. Fra. Esp.  
 Blue Back On  
 CCD/Text Off  
 Parental Guide On

MPAA-X TV-MA

Enter Pass Code - - - -

#### TV-Rating

Rating	FV	D	L	S	V
TV-Y <span style="border: 1px solid black; padding: 0 2px;">U</span>					
TV-Y7 <span style="border: 1px solid black; padding: 0 2px;">U</span>	U				
TV-G <span style="border: 1px solid black; padding: 0 2px;">U</span>					
TV-PG <span style="border: 1px solid black; padding: 0 2px;">U</span>		U	U	U	U
TV-14 <span style="border: 1px solid black; padding: 0 2px;">B</span>		B	B	B	B
TV-MA <span style="border: 1px solid black; padding: 0 2px;">B</span>			B	B	B

Age Based Rating

#### MPAA - Rating

Movie	Rating
G <span style="border: 1px solid black; padding: 0 2px;">U</span>	U
PG <span style="border: 1px solid black; padding: 0 2px;">U</span>	U
PG-13 <span style="border: 1px solid black; padding: 0 2px;">U</span>	U
R <span style="border: 1px solid black; padding: 0 2px;">U</span>	U
NC-17 <span style="border: 1px solid black; padding: 0 2px;">U</span>	U
X <span style="border: 1px solid black; padding: 0 2px;">U</span>	U

Age Based Rating

#### Pass Code Menu

Pass Code Control  
 Pass Code 6688

Enter Pass Code - - - -

## **FUNCTIONS & FEATURES (continued)**

### **Useful Remote Control Features**

#### **DISPLAY**

This key allows you to display the current information of the TV screen on the upper right hand corner of the screen. (channel, antenna mode, time, video, etc.)

#### **TIMER**

This key allows you to directly access the *Timer* menu. For an explanation of this menu features, please see page 10.

#### **SCAN**

Press the SCAN key twice, and the TV will begin to scan through all active channels. To stop the Scan, pressing any key can interrupt scanning. Please note that Scan will only work in Antenna mode.

#### **PICTURE**

Your TV has factory preset picture modes that allow you to optimize your TV viewing. To activate these picture modes, press the PICTURE key, and you can choose among Memory, Theater and Normal.

#### **SOUND**

Press the SOUND key repeatedly, and you can choose among Memory, Speech, Music and Theater.

#### **RECALL**

This key will allow you to return to the last channel you were viewing. Pressing it again will return you to the channel you just left.

#### **CC**

Pressing the CC key will activate the currently selected Closed Captions or Text under the System Menu. Pressing it again will turn off the Closed Caption.

#### **VIDEO**

This key allows you to toggle between antenna and different video modes.

#### **Child Lock**

The Child Lock feature prevents unauthorized viewing of the TV. To activate, press and hold the F key, and then press MUTE. You should see a key symbol appear on the screen. This will lock out all remote functions (except for Standby). To unlock the TV, press and hold the F key and press MUTE. This will unlock the TV. Please note that the only way to activate or deactivate the Child Lock feature is via remote control - please insure that it is stored securely.

#### **0-9/100+**

Press the 0-9 and 100+ keys to enter channel numbers directly (2-69 in the Air mode or 1-125 in the Cable mode).

- 1.To choose a one-digit channel number, press the 0 key, then press another Channel Number key to select a desired number.
- 2.To choose a two-digit channel number, enter a first-digit and then a second digit.
- 3.To choose a three-digit channel number, press the 100+ key so that 1- - appears on the screen, then enter the next digit one and two.

#### **STEREO**

In the TV mode, the TV can automatically identify MTS stereo modes among Mono, Stereo, Stereo/SAP and Mono/SAP.

When receiving signals from external equipment in the Video mode, Stereo is defined as default. Press the STEREO key to set Input to Stereo, L or R.

Signal Received	Press STEREO key
Mono	Mono
Stereo	Stereo, Mono
Stereo/SAP	Stereo, SAP, Mono
Mono/SAP	Mono, SAP

## FUNCTIONS & FEATURES (continued)

### Program the Remote Control

#### To program the remote control

1. Press and hold the TV, VCR/DVD, SAT/CAB or AUX key for over 2 seconds until the INDICATOR on the remote control turns off. Release the key (the INDICATOR will light again) and the remote control enters the PROGRAMMING mode.
2. Use the 0 - 9 keys to enter three - digit code number for your equipment. If the correct code number is entered, the INDICATOR blinks three times. If you enter a code not listed below, or you press any other keys than SEARCH and 100 +, the INDICATOR turns off.

#### To search codes

1. Press and hold the TV, VCR/DVD, SAT/CAB or AUX key for over 2 seconds until the INDICATOR turns off. Release the key (the INDICATOR will light again) and the remote control enters the PROGRAMMING mode.
2. Press the SEARCH key.
3. Press the CH+/- keys to search codes downwards or upwards. Each time you press the CH+/- keys, the code number decreases or increases by 1 while the remote control sends the code number for STANDBY key on your device.

If the desired code number is found, press the 100 + key to program the code for your device until the INDICATOR blinks three times. Then the remote control exits from the PROGRAMMING mode and returns to normal operation. Or press any other key to exit from the PROGRAMMING mode after the INDICATOR blinks rapidly eight times, and the operation is not active.

#### To check the current code number

1. Press and hold the TV, VCR/DVD, SAT/CAB or AUX key for over 2 seconds until the INDICATOR turns off. Release the key (the INDICATOR will light again) and the remote control enters the PROGRAMMING mode.
2. Press the 100 + key.
3. You may read the code number according to the INDICATOR display status as follows.

Code Number			LED Display Status (2 sec. time interval between every two digits.)		
First-digit	Second-digit	Third-digit	First-digit	Second-digit	Third-digit
0	0	0	Blinks rapidly once	Blinks rapidly once	Blinks rapidly once
1	0	6	Blinks once	Blinks rapidly once	Blinks six times
0	4	3	Blinks rapidly once	Blinks four times	Blinks three times
1	5	0	Blinks once	Blinks five times	Blinks rapidly once

#### Notes:

1. If there is no operation within 20 seconds during the steps mentioned above, the remote control will automatically exit from the appropriate operation.
2. If only your TV does not respond to the remote control, try 000 for your TV. If the batteries are weak or exhausted, the remote control can't function, either.

# DVD codes

Brand	Code Number
APEX	300,395
ChangHong	300,301,302,303
Aiwa	312
Hitachi	313
JVC	309,314
Magnvox	308
Mitsubishi	307
Panasonic	315, 386
Philips	308,316,317,318
Pioneer	306,311
Proscan	310
RCA	310
Sanyo	319
Sony	305,320,321
Toshiba	304

# LD codes

Brand	Code Number
Magnavox	322
Panasonic	326,327
Pioneer	328
Sony	323,324,325

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## VCR codes

Brand	Code Number	Brand	Code Number
Admiral	373	Motorola	373
Aiwa	340,387,388	MTC	340,378
Akai	350,379	Mutitech	337,339,340,378
Amstrad	340	NEC	333,334,336,350,352,358,364,374
ASA	357	Nikko	376
Audio Dynamics	334,374	Olympus	383
Audiovox	376	Optimus	373,376
Broksonic	375,377	Optonica	346
Bush	339	Panasonic	335,348,361,365,366
Calix	376	Pentax	336,342,347
Candle	336,376	Perdio	340
Canon	361,362	Philco	343,344,361
Capeheart	349	Philips	343,346,357,361
Carver	343	Pilot	376
CCE	379	Pioneer	334,342,352,358,374
Citizen	336,337,376,379	Portland	349
Craig	331,337,376	Proscan	332,372
Curtis Mathes	332,336,361,372	Quasar	354,355,361
Daewoo	349,363,377,379,380	Radio Shack	329,330,331,341,346,373,376,378,381
Daytron	349	Radix	376
DBX	334,374	Randex	376
Dimensia	384	RCA	332,337,342,347,365,372
Dynatech	340	Realistic	340,341,346,361,373,376,378,381
Electrohome	300,330,376,381,395	Ricoh	369
Electroponic	376	Salora	356
Emerson	330,338,340,345,375,376,377,381	Samsung	337,363
Fisher	329,331,340,341,351	Sanky	373
Funai	377	Sansui	334,350,352,353
GE	332,337,361,372	Sanyo	331
Go Video	359,360,389	SBR	357
Goldstar	336,376,379	Schneider	339
Goodmans	339	Scott	338,345,375,377
Gradiente	378	Sears	329,331,341,342,347,351,376
Grundig	357	Sharp	330,346,381
Harley Davidson	378	Shintom	339
Harman Kardon	364	Sony	367,368,369,370,371
Hinari	339	STS	347
Hitachi	340,342,347,350	Sylvania	340,343,344,345,356,361,378
Instant Replay	385	Symphonic	340,378
JC Penney	333,334,337,347,350,361,364,374,376	Tandy	340
Jensen	342,350	Tashiko	340,376
JVC	333,334,336,350,352,358,374	Tatung	333,350,353
Kenwood	333,334,336,350,352,358,374	Teac	333,340,350,378
Kodak	376	Technics	348,361
Lloyd	340,378	Teknika	340,361,376,378
Logik	339	Toshiba	338,341,342,345,356,363
LXI	376,390,391,392,393,394	Totevision	337,376
Magnavox	343,344,357,361	Vector Research	334,364
Marantz	333,334,336,343,357,361,374	Victor	334,358
Marta	376	Videosonic	337
MEI	361	Video Concepts	334
Memorex	331,340,361,373,376,378	Wards	330,331,337,338,339,340,342,346,347,361,373,376,378,381
MGA	330,345,356,381	XR-1000	378
Minolta	342,347	Yamaha	333,334,336,350,364
Mitsubishi	330,342,345,352,356,358,381	Zenith	370,371



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## CABLE codes

Brand	Code Number
ChangHong	500
ABC	508,509,510,511
General Instrument	525
hamiln	541,542,545,546,547
Hytex	508
Jerrold	506,510,511,512,513,520,525,548,549,550
Movie Time	515
NSC	515
Oak	501,508,516
Panasonic	502,507,544
Philips	514
Pioneer	503,504,517
RCA	524
Scientific Atlantic	504,505,518,519
StarCom	511
Tocom	509,512
TV86	515
United Artists	508
Viewstar	514,515
Zenith	504,521,522,523

## SAT codes

Brand	Code Number
GE	528,531,532
General Electric	526
Hitachi	534,535
Hughes	537,538
JVC	533
Magnavox	536
Panasonic	543
Philips	536
Proscan	528,531,532
RCA	528,531,532,540
Sony	529,539
Toshiba	527,530

## AMP codes

Brand	Code Number
ChangHong	700,701
Aiwa	702
Carver	709
Fisher	709
JVC	706,712
Magnavox	708
Memorex	704
Panasonic	710
Pioneer	703,704
Proton	708
Quasar	710
RCA	707,713
Sony	702,705
Techniques	710
Toshiba	711
Victor	706

## **TROUBLESHOOTING GUIDE**

Check the following guide for a possible correction to a problem before contacting customer service.

Symptoms	Correction
No power	<ul style="list-style-type: none"> <li>• Verify the power cables plug into an outlet with power.</li> </ul>
No picture	<ul style="list-style-type: none"> <li>• Verify the connection from the DVD/VCR video output to the TV video input is secure. Then switch TV to the appropriate Video mode.</li> <li>• Verify an antenna cable is securely connected to the RF in jack.</li> </ul>
No sound	<ul style="list-style-type: none"> <li>• Connect the audio cables into the terminals securely.</li> <li>• Verify the connection from the DVD/VCR audio output to the TV audio input. Then switch to the appropriate mode on the receiver. Refer to your audio amplifier owner's manual.</li> <li>• Verify the volume is at an appropriate level and the mute feature is not on.</li> <li>• Make sure MTS feature is properly set.</li> </ul>
No TV signal	<ul style="list-style-type: none"> <li>• Verify the TV is set to Antenna mode.</li> <li>• Make sure the antenna is securely connected to the RF in jack. Unplug the TV from the wall for 30 seconds, then plug in and try again. Unplug the antenna connection from the back of the TV, unplug the TV from the wall, wait 30 seconds, then try again.</li> </ul>
Stripe or purple interference appears in the screen.	<ul style="list-style-type: none"> <li>• Verify the speakers around the TV set are shielded.</li> </ul>
Picture becomes snowy.	<ul style="list-style-type: none"> <li>• Verify the antenna lead wire is in working condition.</li> <li>• Verify the antenna is connected securely to the RF in jack.</li> </ul>
Picture with multi-image	<ul style="list-style-type: none"> <li>• Move the antenna around to minimize multi-images.</li> </ul>
TV channel not received	<ul style="list-style-type: none"> <li>• Make sure the Air/Cable setting is correct.</li> <li>• Channel may be locked with the block channel feature, such as Parental Control.</li> <li>• Check Add/Erase feature, as channel may have been erased during set up.</li> </ul>
Black box appears on screen.	<ul style="list-style-type: none"> <li>• Verify Closed Caption feature is off.</li> </ul>
Remote control doesn't operate.	<ul style="list-style-type: none"> <li>• Batteries may be weak. Replace batteries.</li> <li>• Make sure nothing is in between the remote and the remote sensor.</li> </ul>
No stereo or foreign language received	<ul style="list-style-type: none"> <li>• Make sure MTS feature is properly set.</li> </ul>

**CITIZEN WARRANTY**  
Consumer Electronics Products

**Thank you for choosing Citizen!**

Citizen Electronics gives the following express warranty to the original consumer purchaser or gift recipient for this Citizen brand product, when shipped in its original container and sold or distributed in Canada by Citizen Electronics or by an Authorized Citizen Dealer:

Citizen Electronics warrants that this product is free, under normal use and maintenance, from any defects in material and workmanship. If any such defects should be found in this product within the applicable warranty period, Citizen Electronics shall, at its option, repair or replace the product as specified herein. Replacement parts furnished in connection with this warranty shall be warranted for a period equal to the unexpired portion of the original equipment warranty.

This warranty shall not apply to:

- a. Any defects caused or repairs required as a result of abusive operation, negligence, accident, improper installation or inappropriate use as outlined in the owner's manual.
- b. Any Citizen product tampered with, modified, adjusted or repaired by any party other than Citizen Electronics or Citizen's Authorized Service Centres.
- c. Damage caused or repairs required as a result of the use with items not specified or approved by Citizen Electronics, including but not limited to head cleaning tapes and chemical cleaning agents.
- d. Any replacement of accessories, glassware, consumable or peripheral items required through normal use of the product including but not limited to earphones, remote controls, AC adapters, batteries, temperature probe, stylus, trays, filters, cables and paper.
- e. Any cosmetic damage to the surface or exterior that has been defaced or caused by normal wear and tear.
- f. Any damage caused by external or environmental conditions, including but not limited to transmission line/power line voltage or liquid spillage.
- g. Any product received without appropriate model, serial number and CSA/cUL markings.
- h. Any products used for rental or commercial purposes.
- i. Any installation, setup and/or programming charges.

Should this Citizen product fail to operate during the warranty period, warranty service may be obtained upon delivery of the Citizen product together with proof of purchase and a copy of this LIMITED WARRANTY statement to an Authorized Citizen Service Centre. In-home warranty service may be provided at Citizen Electronics' discretion on any Citizen television with the screen size of 27" or larger. This warranty constitutes the entire express warranty granted by Citizen Electronics and no other dealer, service centre or their agent or employee is authorized to extend, enlarge or transfer this warranty on behalf of Citizen Electronics. To the extent the law permits, Citizen Electronics disclaims any and all liability for direct or indirect damages or losses or for any incidental, special or consequential damages or loss of profits resulting from a defect in material or workmanship relating to the product, including damages for the loss of time or use of this Citizen product or the loss of information. The purchaser will be responsible for any removal, reinstallation, transportation and insurance costs incurred. Correction of defects, in the manner and period of time described herein, constitute complete fulfillment of all obligations and responsibilities of Citizen Electronics to the purchaser with respect to the product and shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise.

**WARRANTY PERIODS: Parts & Labour (exceptions noted)**

- Audio Products: 1 Year (Remote Control, if applicable - 90 Days)
- DVD Products: 1 Year (Remote Control - 90 Days)
- LCD & Plasma Display TV: 1 Year (Remote Control - 90 Days)
- Microwave Ovens: 1 Year
- Television Products: 1 Year (Remote Control - 90 Days)
- VCR Products: 1 Year (Remote Control - 90 Days, Video Heads - 6 Months)

To obtain the name and address of the nearest Authorized Citizen Service Centre or Dealer, please contact: **CITIZEN ELECTRONICS, 455 Gordon Baker Road Toronto, Ontario, Canada M2H 4H2** or visit our web site: [www.citizen-electronics.com](http://www.citizen-electronics.com)

For more information on this Warranty or Service Locations, please call (416) 499-5611 or toll free 1-800-663-5954, Monday to Friday 9:00am - 5:00pm Eastern Standard Time.

